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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/671,478	09/27/2000	KOUICHIROU WAKABAYASHI	107454	7122

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 06/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/671,478

Applicant(s)

WAKABAYASHI ET AL.

Examiner

Aristotelis M Psitos

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/29/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Applicants' response of 1/29/04 has been considered with the following results.

Information Disclosure Statement

The IDS of 1/29/04 has been received. It is noted that although WO00/14733 was listed on the accompanying PTO-1449 form, no copy of such a document was associated with that IDS. Nevertheless, a duplicate copy of the above noted IDS was received and associated with the file. Hence, the WO document has been reviewed. The JP 200-353301 document is NOT prior art and hence has not been considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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1. Claims 1,2,4-7,9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPO WO/0014733 further considered with Cheung.

Claim 6 is drawn to the apparatus for recording upon a MO disc having a combine optical & magnetic recording head arrangement and a magnetic reproducing head arrangement.

The EPO document (applicants' representatives attention is drawn to the accompanying US pate equivalent – 6560168) in figure 1 depicts such an overall device. The following analysis is made.

Optical head – elements projecting light through objective lens 126 & sil.

Recording magnetic head – elements 107-123.

Reproducing magnetic head – element 117 (GMR), as well as claim 5 limitations

First positioner – vcm 112 – gimbals 124.

Second positioner – actuator 121.

Detector – element 116, controller 104 and actuator VCM (limitations of claim 2)

Slider – element 118 (claim 4 limitations)

SIL – element 122 (claim 6 limitations).

Heads positioned on the same side (limitations of claim 7).

The EPO document lacks the non-pitted substrate record. The substrate is provided with an embossed surface.

Cheung discloses such an ability, that is the positioning information (servo patterns) is found on the same layer as the data.

It would have been obvious to modify the base system of the EPO document with the teaching from Cheung, motivation is to reduce the overall cost/manufacturing steps required to yield the record medium – i.e., creating recording media without the need/step of embossing.

The limitations of claims 9 and 14 re considered self evident – the magnetic field generator and detector, and the light spot of the appropriate size as claimed.

The limitations of claims 11,12 and 14 are method claims equivalent to claims 1, 6,9 and are met when the above combined systems operate.

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2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to the claims above, and further in view of Official notice.

Claim 3 recites a second controller for its inherent control of the magnetic reproduction head. Although the EPO reference uses a single system controller for both, the ability of having separate controllers, each dedicated for one particular head operation is considered well known and Official Notice is taken thereof. Alternatively such is also merely a duplication of abilities, i.e., duplication of the controllers so as to perform appropriate dedicated control.

Such duplication of parts is considered an ability predicated on such considerations such as cost, availability, reliability etc. and obvious to those of ordinary skill in the art.

It would have been obvious to modify the base system as stated above in paragraph 1 with the ability of duplicating the controllers, motivation is to increase reliability of the system by having separate dedicate controllers providing separate dedicated control signals.

8. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to the claims above, and further in view of fig. 3 of 6560168.

The examiner concludes that figure 3 of the reference also teaches the ability of varying the location of the reproducing heads accordingly.

It would have been obvious to modify the base system of the art as relied upon above with the above additional teaching from the document, motivation is considered an merely an alternative placing of the magnetic heads. Location of the heads is considered a relocation of parts and predicated upon such considerations as size, weight, stray magnetic fields, etc. and obvious to those of ordinary skill in the art, especially because no unexpected results are seen to occur therefrom.

9. Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to the claims above, and further in view of Official notice.

Although magnetic marks are created by the above system, the particular shape recited in claim 15 is not specifically mentioned. Nevertheless, the variation of the shape of the magnetic mark is considered merely an ability of the combined effects of the optical and magnetic fields. Various shapes of the recorded signal are considered well known and Official notice is taken thereof.

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It would have been obvious to modify the base system of the references above with the ability to alter the shape of the recorded signal, motivation is considered merely a selection of equivalent shapes with no unexpected results occurring from such a selection.

Conclusion

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos
Primary Examiner
Art Unit 2653

